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The Desirability of Dis- posing of Infected Bodies by Cremation ∞ ∞ ∞ ∞ ∞ ∞ ∞

A PAPER READ BEFORE THE BOSTON HOMŒ-
OPATHIC MEDICAL SOCIETY, JAN. 2, 1896, BY
J. HEBER SMITH, M. D., CHAIRMAN OF THE
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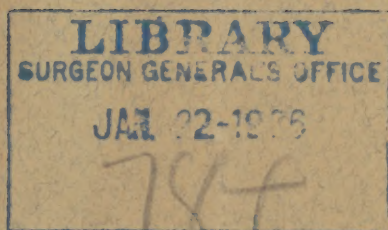


PLATE 1
1871

The Desirability of Disposing of Infected Bodies by Cremation.

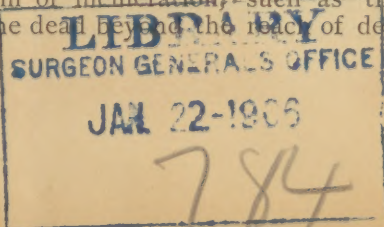
[A paper read before the Boston Homœopathic Medical Society, Jan. 2, 1896, by J. Heber Smith, M.D., Chairman of the Section on Sanitary Science and Public Health.]

The supreme simplifier of infection, as read from the experience of the ages, is fire. There is no *noxa* known to man that can withstand its fervor. Its heat gives back to the ground the elements proper to it, and restores to the fruitful atmosphere her own.

The belief in the efficiency of incineration of the dead for the safety of the living has been so general and so enduring that it would seem to have been developed in an age of experimental knowledge. Homer, in narrating an epidemic that struck Troy's foes like the shafts of an archer, killing "first the mules and swift hounds, and then the Greeks themselves," says that, for nine days, "the fires of death went never out." There is no more vivid picture of human interest in all the language of necrology, though after the lapse of three thousand years, than this poet's recital of the burning of the body of Patroclus by his friend Achilles. Their ashes were mingled in one golden vase, and the promontory of Sigæum was said to have marked the place of their repose.

Fire from a funeral pile was one of the sacred sixteen comingled on the ancient Median altars. The corpse was pollution to a Mede or Persian, and running through all the minute directions for the treatment of a dead body, in their *Vendidad, Fargard*, V.-VIII., is the idea of its utter impurity. Yet the fire in which a dead body had been burned was the most indispensable of all to the symbolical flame on their altars, for it was thought to have absorbed the fire in the human tabernacle, — a spark of the divine spirit. Though misrepresented as sun-worshippers, it is a fact that even the sun's rays were not allowed to fall on these sacred fires in their *Atish-kundars*. Such reverence, easily mistaken for idolatry, doubtless often became idolatrous. The media and symbols of the Omnipresent, in every age, are confounded with the Supreme Being himself.

Other motives besides fear of contagion may in part have led to the diffusion of the custom of incineration, such as the wish to place the remains of the dead beyond the reach of des-



ecration, or to possess in harmless form a revered remembrance of those loved in life. The practice maintained its hold with inhumation in Greece and Rome, and through the vast populations of Asia and northern Europe. But though the influence of Roman, and especially Greek, ideas and usages was most potential on the early Christian church, she took her custom of earth burial from the Jews, and, after the lapse of eighteen centuries, continues to regard this election of the method of this "Chosen People" as lending a degree of sanctity to the practice of inhumation. But the Jews, whatever may have been their method of disposing of their dead in the early centuries of our era, are known to have been adaptive to environment in their earlier history. The law of Moses offered them no burial ritual. Always rationalistic and practical, whether in palaces or captivity, they practised burial, embalming, or incineration, according to outward stress. Their law—a law of life and not for the dead—enjoined minutely observances for obtaining "length of days" through keeping a pure mind in a clean body. Even the word for death, "mut," is omitted.

But funerary associations and rites, whether simple or stately, are inherent in human nature. Their observance antedates written history. In evidence I will simply cite a translation of the memorial of Chnemhotep, one of the earliest of the Kings of Egypt, recently brought to light. It reads: "I have caused the name of my father to increase, and have established the place for his funeral worship, and the estate belonging thereto. I have accompanied my statues into the temple. I have brought to them their offerings of pure bread, beer, oil, and incense. I have appointed a funerary priest, and have endowed him with land and laborers. I have established offerings for the deceased of every festival of the Necropolis."

But it can be said without irreverence, that customs however venerable can be improved, or set aside, through enlarging knowledge of the conditions of life and death. In the early part of the present century, there were evidences of the need of reformed methods of disposal of the dead such as the present generation would scarcely believe possible. But leaders of the medical profession were alive to the necessity for relief from intramural interments. The learned Dr. Jacob Bigelow, of Boston, in 1823, wrote an influential paper, entitled "The Dangers and Duties of Sepulture; or, Security for the Living, with Respect and Repose for the Dead." This appeal for reformed methods inaugurated a crusade against intramural interments that resulted, in 1830, in the establishment of Mount Auburn Cemetery, the first of our rural cemeteries.

In London, with its immense population, the churchyard area, as late as 1849, amounted only to about 218 acres, within which were annually buried over 50,000 bodies. Such a number,

according to the city's ratio of mortality, would cause this limited space to be filled each decade. The same condition of affairs was common all over Europe.

In this country, the older graveyards were full to within eighteen inches of the surface. The stench from these cemeteries was sickening. During the cholera epidemic of 1849, the disease seemed to have a focus in their vicinity to such an extent that some were ordered closed against further interments. Would that all had been closed, and forever! But reforms move slowly against the forces of false sentiment, self-interest rooted in ignorance, and a hoary conservatism that is always more obstructive than corrective, and that halts humanity's heralds as though fearing to render account for its stewardship of unnumbered centuries.

Cremation, in its present most timely advent, comes forward as if Prometheus had freed his limbs from the chains of Strength and Force, to bring mankind once more the fire of the immortals. The torch, no longer inverted but aggressively held, is helping drive from the city's heart the shadow of death.

But the dead, though borne farther away, continue to be little more than nominally buried, by reason of the interposition between them and the earth of such media as wood, lead, and brick. Interment as still practised needs administrative reform and, in the instance of infected bodies, abandonment of the practice in favor of incineration. The evils created by inhumation in swarming cities, so vividly portrayed by perhaps over-zealous advocates of cremation, I am willing to grant are not inherent in the principle of earth-burial. My only apology for sustaining an opinion on this subject in any public way is that I am absolutely sincere and equally in earnest. But I do not go to the length of recommending that incineration, as a universal method of disposing of the dead, be made mandatory, or enforced with penalties for non-compliance. Every citizen, however, should favor the statutory correction of the faulty methods with which earth-burial is now effected.

The evils inhering in the practice of interment, as has been suggested, are independent of its principle, and largely of man's own creation. After a thoughtful consideration of the subject, from every point, I candidly concede, although intending my own remains for the columbarium, that the natural destination of all the organized bodies that die on the earth's surface is the earth, and that the earth is fully competent, by its *unhindered* agency, to effect the resolution of all bodies committed to it. There is a remedy for the evils that threaten from burying the dead in sealed coffins, brick graves, and tombs, — a practice that stores in our midst a multitudinous impletion of human remains in every stage of decay. The remedy, next to prevention, lies in a practical recognition of an obvious law of nature. The law

referred to is the deodorizing and disinfecting power of natural soil over animal remains that are buried according to nature. The earth, whether wild pasture or glebe of ecclesiastical benefice, is entirely competent to effect the resolution of its dead, under right conditions.

Do we not all know that if we look for a body that has been buried for five or six years (without inclosure), there is found only the inorganic part of it? But bodies that have been buried in coffins, whether of wood or metal, are liable to be found after many years with their inclosures intact, quite unresolved, and, even after several centuries, in proved instances, putrid, horrible tenants-in-perpetuity of the soil.

In certain large cities of Europe, such *carriion-troves* outnumber, by hundreds of thousands, the living. They lie, incapable of further change except through reformed legislation or a cataclysm of nature, a reproach to those responsible for this state of things, and a source of danger for generations to come. Is it to be wondered at that our loved ones die in old-world capitals of unmanageable fevers, the exciting causes of which any government might eradicate at far less cost than the labor and treasure now expended on preparations for war?

Undeterred by the evils created by our progenitors, we are responsibly engaged in extending and perpetuating them. We, as citizens, should oppose the granting of privileges to corporations for the establishment of cemeteries too near our growing cities for the good of the public. Let us in every right way help do away with burial customs that are, in effect, a permanent tenure of land by the dead. The hand of death must not be suffered to hold the foot of progress.

The same great law applies to the body of the king as to the remains of a beggar; it must ever be a hurtful practice to bury the dead in sealed coffins, vaults, and tombs. Better to die at sea, and some memory of us kept by cenotaph above an empty grave, than to imperil those who are to inherit our lands and name. Graves should not be re-opened until ample time has been given for the complete resolution of their contents. Who would wish his remains so kept from the operations of nature that a laborer's pick by a chance blow might endanger society? In Xenophon's "*Cyropædia*," Cyrus the Elder is represented as saying, with a wisdom above that of our own vaunted civilization: "When I am dead, my children, do not enshrine my body in gold and silver, or any other substance, but return it to earth as speedily as possible; for what can be more desirable than to be mixed with the earth which gives birth and nourishment to everything that is excellent and good?"

The common cemetery is not solely the property of one generation, now departed, but is likewise the common property of the living, and of generations yet unborn. Some of the earliest

records of the old English cathedrals and parish churches provide for the payment of larger fees for "chested buryalls" than for "unchested;" but mention of coffins is nowhere made in the burial service of the Church of England. The coffin is of somewhat recent origin with our English ancestry, it appears, but it has become a costly and deplorable feature of the profusion which mars the rites with which we lay away our dead. As an illustration of the comparative imperishability of wood in ordinary soil, it is well known that, within a recent period, wooden coffins of the time of Charles II. were removed from Holborn Cemetery in as sound a state as those of recent burial. Wood in moist earth is nearly indestructible.

Burial has been conducted in a way so unnatural that the intramural graveyards offer a soil so saturated with animal matter that it can no longer be called earth. In granting privileges for the establishment of new cemeteries, suburban only for a year and a day with our rapidly encroaching population, are those who administer the laws exercising due care as to the kind of location selected and as to the quality of soil chosen? And are they sufficiently assured that the same pollution of the ground and neighboring waters is not threatening to repeat and multiply the horrors of the older graveyards? Public health is purchased only by public vigilance.

No longer ago than 1875, in a report of the Directors of the General Cemetery Company (of England), in recommendation of the plans which they were proposing for their future guidance, they say: "It has been found that seven acres will contain 133,500 graves; each grave will contain ten coffins; thus accommodation will be found for 1,335,000 deceased paupers." A system of burial based on such a betrayal of humanity by decimals was at once inaugurated. It was suffered in this age of boasted intelligence to go into effect.

Surely, whichever way the minds of physicians incline on the question of cremation, they must unite in deprecating a continuance of the old *régime*. Our education and observation must compel us to oppose strenuously the accumulation in sealed inclosures of unresolvable animal matter, to the perversion of the earth from the exercise of its function, until, becoming supersaturated with death, it menaces the public health with exhalants laden with the potency of enteric disease and the slow tortures of malaria. An ideal civic administration will aim to preserve, or provide, an uncontaminated soil, pure water, and a pure atmosphere. In the interest of sanitary science and of society, I ask, Is there a surer and simpler way of disposing of infected bodies than that of modern cremation? Shall we not lend our influence to this method,—and to other needed reforms in interment which need administrative enforcement,—from this time, without division? But you will need, as physicians, to deal very

thoughtfully with all who may oppose a change. Let us be very tolerant of feelings that have become entwined with the deep convictions of our fellow citizens, and associated with the most sacred hopes and offices of religion, which to some appear in danger of profanation.

That incineration has a religious side none of us will deny. It is not for us to offer any censure for the quiet but observant conservatism of the church in relation to the increasing interest in cremation. But may we not venture to offer that this method of disposing of the dead seems, on careful thought, to comport with the purest ethical teachings of Jesus, the consideration of others as of ourselves?

Cremation is not opposed to the belief in man's survival of the dissolution of the physical body, nor to the lucid and generally accepted explanation of the doctrine of its resurrection given by the Apostle Paul. From his scholarly statement of man's upspringing from the state of physical death to a higher life, we are not called upon to dissent, nor should we throw the shadow of our positivism upon any light that can brighten the grave. The doctrine of the literal resurrection of the material body is not the palladium of Christianity. Our choice of cremation must not be interpreted as an act of indifference to the position of the Christian church. Despite the somewhat depressing influence of our study of death and of our frequent and intimate relations with the dying, we cherish the hope, common to humanity and older than Christianity, that when our work is finished, we shall depart like our fathers, crossing the valley of darkness, with all our faculties complete, our imperfections thrown off, clothed in a shining form, beyond this lower gloom ascending like pure flame, to achieve the perfection of a divine ideal.

But for one moment let us consider just what is the real and present attitude of the Christian church toward the practice of cremation. What do her influential exponents say? The Very Rev. J. Hogan, S.S., in *Donahoe's Magazine* for July, 1894, writes: "Doctrinally, the Church has nothing to oppose to it, for no divine law has determined the manner of disposing of the dead. Practically, she is prepared to admit it in cases of necessity, such as those of war or pestilence, when a large number of decaying bodies may become a danger to the public health unless they are reduced to ashes. We go further, and say that if we could suppose in some remote period the necessity to have become common, doubtless the Church would accommodate herself to it. But in the present circumstances she objects to the practice. She objects, first of all, because she is instinctively conservative, and dislikes all unnecessary changes, especially when the change would be a departure from what she has practised universally and invariably from the beginning."

After citing the several decrees of Rome in relation to questions of cremation referred to the Vatican, dating from September, 1884, to December, 1886, he continues: "From these rulings it is easy to gather the mind of the Catholic Church. She dislikes a change; she maintains her ancient customs, to which she is bound by many ties; yet she is ever ready to take into account the requirements of the day and the advent of new methods, so long as they are not introduced in a spirit of hostility to her faith. She clings to the past; yet she leaves to each individual bishop to decide in what measure it may be advisable to depart from it."

It is well known that the late Bishop Phillips Brooks was favorable to cremation. His successor, Rt. Rev. William Lawrence, addressed the annual meeting of the New England Cremation Society, on Dec. 19, 1893. He began by observing that cremation as a means of disposing of the bodies of the dead is worthy of the thoughtful consideration of Christian people. He further expressed his conviction that under certain conditions it merited adoption by them for at least three reasons:—

- (1) "Cremation is in behalf of the living.
- (2) "Cremation is a reverent method of disposing of the bodies of the dead. All the details of the service and the incineration are consistent with reverence.
- (3) "Cremation is in harmony with Christian principles. That burial has been the custom for centuries is no proof that other methods are unchristian."

The hygienic argument for cremation, considered from a bacteriological standpoint, it appears, must await further reports of painstaking and unbiased studies by experts. Investigations of the number and kind of bacteria found in graveyard and other soils, at varying depths, and in ground-water in the vicinity of cemeteries and remote from animal remains, appear to return somewhat contradictory results. This might be expected from the very nature of the methods employed. But we are left in no doubt that water and air are often contaminated by the presence of putrifying animal remains. This form of investigation must remain open for further work by bacteriologists, for the ground, from data at hand, seems to have been simply an arena for mutual criticism of technique.

The movement in favor of cremation in this part of the United States did not begin until 1883, but before the end of 1893 the Forest Hills Crematorium had been completed, and the first body reduced to ashes therein was that of the revered Lucy Stone. Her fiery soul thus lighted the way in a second reform.

In addition to the crematorium, added facilities for incineration are being brought to a high degree of excellence, such as transportable cinerators, compact, light, and rapid in execution. The French army has a number of these, and their gen-

eral use in war may transform the conditions of the terrible days following battle, which have hitherto evoked, after the sword, the pestilence and the skeleton with the scythe.

In civil life these cinerators will serve to prevent the possibility of spreading contagion by the conveyance of infected bodies through public thoroughfares. It is to be hoped that one or more of them may soon be owned and operated by all of our large towns and cities, and come to be looked upon without prejudice, as contributing to the public safety.

Our paths are to take us presently from the knowledge of living men. Let us, while we may, unite for the prevention, as well as the remedying, of every evil that afflicts the people. To this end, in closing, permit me to offer for your consideration a resolution which I hope you may adopt, at least in substance, this evening. It is as follows :—

Resolved: That as physicians, students of sanitary science, and members of the Boston Homœopathic Medical Society, at its Annual Meeting, Jan. 2, 1896, we hereby recommend to our fellow citizens the disposal of infected bodies by cremation, as the method that meets our best approval.

[This resolution was adopted by an unanimous vote of the Society.]

